



Foreign Agricultural Service

**GAIN Report**

Global Agriculture Information Network

Required Report - public distribution

Date: 4/16/2002

GAIN Report #TU2017

**Turkey**

**Sugar**

**Annual**

**2002**

Approved by:

**Susan R. Schayes, Agricultural Counselor**

**U.S. Embassy, Ankara**

Prepared by:

A. Ünal Sarigedik, Agricultural Specialist

---

**Report Highlights:**

After falling to 12.5 MMT in MY 2002 (Sept 2001-Aug 2002), Turkish sugar beet production is expected to increase to 17.3 MMT in MY 2003 as a result of domestic policies and favorable weather conditions. The sugar industry, however, is undergoing major reforms to balance domestic needs with actual production, and reduce the need for Government subsidies to the sector. Turkish Sugar Corporation stocks are decreasing to much more manageable levels. The recently established Sugar Board announced MY 2003 production quotas of 2,149,000 MT (refined value) for beet sugar and 210,700 MT for starch-based sweeteners.

---

Includes PSD changes: Yes  
Includes Trade Matrix: Yes  
Annual Report  
Ankara [TU1], TU

Executive Summary .....	1
Production .....	2
Consumption .....	3
Trade .....	4
Stocks .....	4
Policy .....	4
Production Policy .....	4
Trade Policy .....	6
Statistical Tables .....	7
PS&D Table for Sugar Beets .....	7
PS&D Table for Centrifugal Sugar .....	8
Export Trade Matrix .....	9
Import Trade Matrix .....	10

## **Executive Summary**

The Turkish sugar industry is going through a major reform. A Sugar Board was established according to the Sugar Law which was adopted in last April and, in March 2002, the Board announced beet sugar and corn-based sweetener production quotas for MY 2003 (September 2002 - August 2003).

Based on this announcement, Turkey is projected to produce a total of 2,360,000 MT of sugar (refined value) in MY 2003 (September 2002-August 2003) which will include 2,149,000 MT (2,336,000 MT raw value) centrifugal sugar from sugar beets. Beet-based sugar production was allocated between the Turkish Sugar Corporation (TSC) and PANKOBIRLIK. TSC will be producing 1,675,000 MT (1,820,000 MT raw value) and PANKOBIRLIK will be producing 474,000 MT (515,000 MT raw value) of Centrifugal sugar.

TSC plants signed contracts with farmers to produce and purchase 13,500,000 MT of sugar beets. Similarly, PANKOBIRLIK plants signed contracts with farmers to produce 3,800,000 MT of sugar beets. The total 17,300,000 MT of sugar beets will be produced on 410,000 hectares (320,000 hectares for the TSC and 90,000 hectares for PANKOBIRLIK).

The TSC, which has developed huge stocks over the past few years has been successful in reducing stocks through increased exports. TSC's current stock level will meet emergency needs. Privately-owned plants do not carry stocks from one year to another.

The corn sweetener sector quota was announced at 210,700 MT which is substantially below capacity and could force some facilities to close. The industry, which has several large foreign-owned facilities, is hoping that the Board will agree to an adjustment which would raise the quota closer to a viable level.

The 2001 tariff schedule includes a 110.4 percent duty for the CIF value of sugar imports from the European Union and 138 percent for all other origins, a marginal decrease from the previous year. The TSC is responsible for issuing export licenses, while the Foreign Trade Undersecretariat issues import licenses, based on the supply and demand outlook.

## Production

The Turkish sugar industry is undergoing major reforms, the most significant being privatization and establishment of a Sugar Board according to the Sugar Law which was adopted in April 2001. In March 2002, the Board announced sugar and corn-based sweetener production quotas for the first time in Turkey. According to the Board's decision, Turkey is projected to produce a total of 2,360,000 MT of sugar in MY 2003 (September 2002-August 2003). Out of this total, 2,149,000 MT (2,336,000 MT raw value) will be Centrifugal and produced from sugar beets. The remaining part of the quota, 210,700 MT, is for corn-based sweetener producers.

Beet-based sugar production was allocated between the Turkish Sugar Corporation (TSC) and PANKOBIRLIK. TSC will be producing 1,675,000 MT (1,820,000 MT raw value) and PANKOBIRLIK will be producing 474,000 MT (515,000 MT raw value) of centrifugal sugar. TSC plants signed contracts with farmers to produce and purchase 13,500,000 MT of sugar beets. Similarly, PANKOBIRLIK plants signed contracts with farmers to produce 380,000 MT of sugar beets. The total 17,300,000 MT of sugar beets will be produced on 410,000 hectares (320,000 hectares for the TSC and 90,000 hectares for PANKOBIRLIK).

Weather conditions for MY2003 (September 2002-August 2003) beet production has been good so far and planting has already started in some regions. If the rains stop long enough, sugar beet production will be completed in the next few weeks. Delayed planting can negatively affect production, although beet yields largely depend on rains received during the late spring and summer.

Official production data is not yet available for MY 2002 (Sept. 2001 - Aug. 2002). According to unpublished data, area and production appear to be lower than our previous estimate, with yields averaging 35,204 kilograms per hectare (compared to 42,632 kilograms last year) and an average sugar content of 16.51 percent (compared to 17.11 percent last year-- all refined basis).

According to the Sugar Law, the Government of Turkey (GOT) will not announce a procurement price for sugar beets in MY 2003. Instead, plant owners will negotiate their sugar beet procurement prices with farmers and/or representatives. Mechanisms of these transactions are still unclear, and will be subject to additional GOT announcements.

The sugar beet support price in MY 2002 was TL 50,000 per kilogram of sugar beets, which was 50 percent higher than it was a year ago, but still significantly below Turkey's annual rate of inflation-- which has been running around 90 percent annually. For the first time, the GOT did not announce premiums for sugar contents above 16 percent polar sugar. However, the Chairman of the privately owned Konya plant, who is also the Chairman of the PANKOBIRLIK Executive Board, recently announced that he will provide a premium to member farmers for the higher (than 16 percent) content. The directors of the other privately owned plants (Kayseri and Amasya) are likely to follow PANKOBIRLIK's practices.

Sugar beets are produced throughout Turkey and are grown under contracts with state-owned or state-regulated refineries. As part of the contract, the refineries prescribe optimal crop rotations for the region. Beets generally are grown in three or four year rotations which also include cereals, pulses, fodder crops, and sunflowers. Planting begins as early as February and continues through May with harvest from late July to November. According to recent

statistics, approximately 380,000 farms are engaged in sugar beet production. The TSC and PANKOBIRLIK factories have been guaranteeing purchases of all beets produced under contract, providing an incentive for beet production, even if prices were not as high as farmers would like.

Farmers contracting with the TSC are obliged to use TSC provided seeds. Although they are permitted to purchase fertilizers from other sources, they generally prefer to use TSC fertilizers because payment is deducted after the harvest, when the farmer receives his sales proceeds. However, this advantage is countered by serious delays in TSC payments. Final payments may not be received until March or even later. Since the final payment represents a significant portion of total return, the opportunity cost of the farmers' capital is significant, particularly with high inflation.

TSC also provides harvesting equipment or custom harvest services, as needed. Farmers are responsible for other inputs, including land, labor, irrigation, and transportation of the beets from the farm to the factory or other central collection points.

## Consumption

The total number of sugar factories in Turkey is now 30, of which 25 are fully owned by the Turkish Sugar Corporation. The other five factories are jointly owned by the TSC in partnership with other entities. Three of these five jointly-owned factories, located in Konya, Kayseri and Amasya, are owned by the Central Union of Sugar Beet Producers Cooperatives (PANKOBIRLIK). Each factory is assigned a geographical region and farmers within a region may contract with the factory to produce sugar beets. So far, except for beet procurement prices and ex-factory sugar prices, which used to be set by the GOT, PANKOBIRLIK's factories functioned independently of the Turkish Sugar Corporation and are supervised by their own executive boards.

In general, Turkey's sugar industry is aging and has limited capacity. To reduce losses and improve efficiency, the TSC modernized some older factories and had plans to develop new ones. With new GOT policies which discourage investment at this point, the new Sivas plant project was canceled. Plans to modernize PANKOBIRLIK's Bogazliyan sugar plant and the private sector's Aksaray plant have also been put on hold.

According to unpublished data for MY 2002, the TSC bought 9,753,760 MT of beets and paid (or will pay since all payments have not been completed yet) a total of TL 482 trillion (or about USD 360 million), compared to TL 526 trillion last year. Since part of this was paid as advance payments or inputs in kind, TSC currently owes about half of this amount (TL 242 trillion) to the farmers. If TSC wants to avoid interest payments, all debts must be paid by the end of April. Similarly, PANKOBIRLIK plants procured 2,796,886 MT of sugar beets worth of TL 151 trillion (or about USD 110 million) and have paid nearly half (TL 74 trillion) so far.

In the past, the Turkish Sugar Corporation sold sugar at subsidized prices to prevent inflationary pricing in domestic markets. Consumption increased substantially in response to the relatively low, subsidized prices. For the last several years, however, the consumers' subsidy on sugar has been gradually reduced and prices have increased according to production costs. As a result, the annual increase in total consumption declined to about two percent, closer to Turkey's population growth rate. Annual per capita sugar consumption is unofficially estimated to be about 30 kilograms (refined basis).

Starting from MY 2003, each plant will set ex-factory prices of sugar in accordance with their production costs. The

following table summarizes the changes in ex-factory prices [TL per kilogram, value-added tax (VAT) included] since our last sugar voluntary report (TU1041) dated September 27, 2001.

Type of Sugar	July 13, 2001	October 15, 2001	December 28, 2001
Crystal Sugar:			
- In 50 kilogram bags	703,690	879,660	1,011,636
Cube Sugar:			
- In 50 kilogram bags	764,370	955,476	1,098,792
- In 1 kilogram box (25 boxes)	807,975	1,010,016	1,161,540

(As of 4/15/02, USD 1.00 is approximately TL 1,300,000)

Retail prices are determined by market forces. The Confederation of Grocers and Supermarkets (a retailers' association), which used to suggest sugar selling prices to their members, is no longer providing this advice.

Consumption of sugar substitutes, including glucose, HFCS, and artificial sweeteners, is limited but is expected to increase, considering Turkey's growing demand, the need for a variety of sweetener products, and the economics of sweetener production. There are three international and two local companies currently producing starch-based sweeteners, with annual installed capacity of 600,000 MT (450,000 MT fructose and 150,000 MT glucose). Turkey uses high duties to protect domestic corn producers which, in turn, result in high production costs for fructose and glucose. The starch-based sweetener producers have asked the GOT to increase their share of the quota to 15 percent, since the current 10 percent quota level is significantly below nominal capacity levels. They have also argued that their quota should be adjusted to reflect dry solid content of the products, and that glucose production should be excluded from the overall quota since it is not included under the EU system.

PS&D estimates for MY 2001 and MY 2002 consumption were both lowered slightly to reflect decreased sales as a result of Turkey's economic recession. Consumption is expected to recover in MY 2003.

## Trade

To minimize the cost of maintaining a large inventory, the TSC began exporting large quantities of sugar a few years ago. The huge difference between beet sugar producer prices and world market prices resulted in huge losses for TSC, which were supported by the Treasury. These subsidies (and subsidized exports) are ending, in accordance with Turkey's economic reform program and IMF agreement. According to unofficial sources, Turkey exported about 350,000 MT (raw value) of sugar during the first half of MY 2002. The MY 2001 columns of the trade matrixes present trade data for the entire marketing year (September 2000 - August 2001) while the MY 2002 columns only include data for the first four months (September through December, 2001). To eliminate sugar imports through other entry points, in March 1999, the GOT declared Istanbul as the sole "specialized" customs entry point for sugar.

## Stocks

Official stock statistics are not available. PS&D stock estimates are based on information received from both public

and private sources. According to industry sources, TSC had 1,020,000 MT and PANKOBIRLIK had 90,000 MT (both raw values) of sugar in stock at the end of March 2002. By the end of MY 2002, TSC stocks are expected to fall to a much lower level (260,000 MT raw value for emergency purposes) compared to the previous years and PANKOBIRLIK will eliminate all of its stocks.

## **Policy**

### **Production Policy**

Sugar refining has been a state monopoly in Turkey since the Turkish Sugar Corporation was established in 1935, when sugar was considered a strategic commodity. The government used to exercise support prices to regulate production and high tariffs and import and export licensing to control trade. In the 1980's and early 1990's, attractive support prices and limited controls led to an expansion in area, which, when combined with excellent growing conditions, resulted in overproduction. Unstable political conditions, and high support prices further exacerbated the situation leading to record production levels. To minimize inventory costs, the GOT authorized the TSC to export its surplus supply, even at a loss.

Many of the Government's decisions on price supports have been influenced by or based on domestic politics. There was an attempt to discourage production (and contain inflation which averaged about fifty to ninety percent annually during the last several years) by delaying price announcements until harvest time (rather than before planting), but the overall pricing policies sent the wrong signals to sugar beet farmers, who continued to expand acreage, despite uneconomic costs of production. Given limited land and financial resources, the Government will need to encourage the use of alternative sweeteners to meet Turkey's growing demand in the long term.

The TSC adopted a new policy to limit sugar beet production in MY 1999 and began basing its contracts with farmers on the quantity of sugar beets they would produce. The previous policy of basing contracts on area planted in sugar beets allowed excess production by both authorized and unauthorized growers. The original plan was to pay the farmers the full support price if they produced the quantity contracted (with an allowance of +/- 25 percent). If farmers had deficit/surplus production, they would be paid 20 percent less than the announced price. However, the GOT bowed to election year pressures during the program's initial year, and increased the allowable surplus from 25 percent to 50 percent.

TSC's policies were unchanged in MY 2000 with allowable surplus 25 percent. TSC factories again signed contracts with farmers on the basis of production quantity, but lowered the acceptable variation to +/- 15 percent for the quantity of beets sold to the TSC factories below or above the defined range in MY 2001, in addition to the reduced support price by fifty percent. TSC has maintained these levels but, did not pay a premium for the higher (than 16 percent) sugar content in MY 2002. PANKOBIRLIK allowed a margin to +/- 25 percent (compared to the TSC's 15 percent) in MY2002. Also, Konya plant decided (most likely Kayseri and Amasya plants will follow) to pay a premium for the higher sugar contends.

The Turkish Sugar Law had been in effect since 1956. During the last four years, the GOT began to develop new legislation since the old law was considered out of date and did not cover important sugar issues, such as, non-sugar sweeteners. Parallel to the commitment made by the GOT to the IMF (in their letter of intent), the new Sugar Law was adopted by Parliament and became effective in April 2001.



The new Sugar Law presumes that domestic demand will be met by through domestic production and controls both sugar beet and cornstarch-based sweetener production by establishing quotas. According to the new Law, after MY 2002, the TSC will no longer announce sugar beet procurement and ex-factory sugar prices. Existing sugar plants will be allowed to be privatized and/or new plants (after receiving the quota) may be operated without any government permission. The law will be in effect for five years after which time market forces will determine sugar and sweetener production, in accordance with Turkey's WTO obligations.

The newly established Sugar Board is charged with studying the demand and supply of sugar and sweetener in Turkey for the next five years, and establishing quotas for sugar and sweetener productions according to projected needs for the following marketing year. Each plant will have their own quotas based on production levels in the past three years (with some possible adjustments for new facilities). Unused quotas will be canceled. The Sugar Board currently consists of seven members, including three members from the government, three members from the sugar industry, and one member to represent the starch-based sweetener industry. (Additional details are available in TU1015).

In March 2002, the Sugar Board announced 2,360,000 MT in production quotas for MY 2003 (September 2002 - August 2003). Of this total, 2,149,000 MT will be produced from sugar beets and 210,700 MT will be corn-based. The Turkish Sugar Corporation will produce 1,675,000 MT (1,820,000 MT raw value) and PANKOBIRLIK will produce 474,000 MT (515,000 MT raw value) of beet sugar. Out of the total beet sugar produced, 2,107,000 MT (2,290,000 MT raw value) will be produced within A Quota, which can be sold only domestically. Two percent of A Quota production level (42,000 MT refined or 45,650 MT raw value) will be produced under Quota B for emergency needs. In addition, The Sugar Board announced a 210,700MT quota for cornstarch-based sweetener producers. The Sugar Law limits this quota to ten percent of the Quota A.

The quota allocations pleased neither beet nor starch-based sweetener producers. Beet-based sugar producers will be able to receive the full price if they produce no more than they were assigned. If a farmer produces more than he was supposed to, then he will be paid only for the quantity he was assigned to produce. The remaining part of his production will be considered in Quota C which sugar cannot be sold domestically, only exported. Payment for quota C sugar will be based on world markets, export prices, which are considerably below domestic levels. Furthermore, if a farmer produces a significantly lower quantity than he is assigned to grow, his quota will be reduced for the following year.

Corn starch-based sweetener producers, who already have an established capacity of 600,000 MT, are also unhappy because the announced quota would force them to operate at 35 percent of their existing capacity. The Sugar Law allows the Council of Ministers to increase their quota from ten percent to fifteen percent, but this decision would be politically charged. While corn-based sweeteners argue that their investments should be protected from unanticipated regulations, beet producers are arguing that an increase in corn sweetener production quotas would result in lower prices for beet producers and negatively affect their ability to privatize their facilities.

### **Trade Policy**

The 2002 Import Regime imposes a duty of 110.4 percent on the CIF value on sugar imports from the EU countries and 138 percent from all other origins. TSC issues export licenses and the Foreign Trade Undersecretariat issues import licenses, both based on the supply and demand outlook.





## Statistical Tables

### PS&D Table for Sugar Beets

PSD Table						
Country	Turkey					
Commodity	Sugar Beets				(1000 HA)(1000 MT)	
	Revised	2001	Preliminary	2002	Forecast	2003
	Old	New	Old	New	Old	New
Market Year Begin		09/2000		09/2001		09/2002
Area Planted	450	450	360	359	0	410
Area Harvested	440	440	360	357	0	405
Production	18758	18758	14500	12551	0	17300
TOTAL SUPPLY	18758	18758	14500	12551	0	17300
Utilization for Sugar	18758	18758	14500	12551	0	17300
Utilizatn for Alcohol	0	0	0	0	0	0
TOTAL UTILIZATION	18758	18758	14500	12551	0	17300

**PS&D Table for Centrifugal Sugar**

PSD Table						
Country	Turkey					
Commodity	Centrifugal Sugar				(1000 MT)	
	Revised	2001	Preliminary	2002	Forecast	2003
	Old	New	Old	New	Old	New
Market Year Begin		09/2000		09/2001		09/2002
Beginning Stocks	783	783	642	765	242	261
Beet Sugar Production	2717	2756	1900	1796	0	2336
Cane Sugar Production	0	0	0	0	0	0
TOTAL Sugar Production	2717	2756	1900	1796	0	2336
Raw Imports	0	0	0	0	0	0
Refined Imp.(Raw Val)	2	2	0	0	0	0
TOTAL Imports	2	2	0	0	0	0
TOTAL SUPPLY	3502	3541	2542	2561	242	2597
Raw Exports	0	0	0	0	0	0
Refined Exp.(Raw Val)	810	826	300	350	0	100
TOTAL EXPORTS	810	826	300	350	0	100
Human Dom. Consumption	2000	1950	0	1950	0	2150
Feed Dom. Consumption	0	0	0	0	0	0
TOTAL Dom. Consumption	2050	1950	2000	1950	0	2150
Ending Stocks	642	765	242	261	0	347
TOTAL DISTRIBUTION	3502	3541	2542	2561	0	2597

**Export Trade Matrix**

Export Trade Matrix			
Country	Turkey		
Commodity	Centrifugal Sugar		
Time period	Sep. - Aug.	Units:	Metric Tons
Exports for:	2001	Sep. - Dec.	2002
U.S.	15	U.S.	
Others		Others	
Georgia	191783	Georgia	67248
Syria	150626	Azerbaijan	35455
Iran	90467	Syria	20544
Azerbaijan	90288	Iran	15475
Afghanistan	20901	Afghanistan	4348
Egypt	17452	Northern Cyprus	2613
Bangladesh	14946	Croatia	1304
United Arab Em.	9526	United Arab Em.	1087
Greece	8209	Egypt	1027
Northern Cyprus	7268	Turkmenistan	609
Total for Others	601466		149710
Others not Listed	224404		131183
Grand Total	825885		280893

**Import Trade Matrix**

Import Trade Matrix			
Country	Turkey		
Commodity	Centrifugal Sugar		
Time period	Sep. - Aug.	Units:	Metric Tons
Imports for:	2001	Sep. - Dec.	2002
U.S.	10	U.S.	
Others		Others	
United Kingdom	451	United Kingdom	254
France	91	Germany	28
Italy	44	France	22
Spain	9	Italy	20
Germany	4		
Total for Others	599		324
Others not Listed	1853		
Grand Total	2462		324